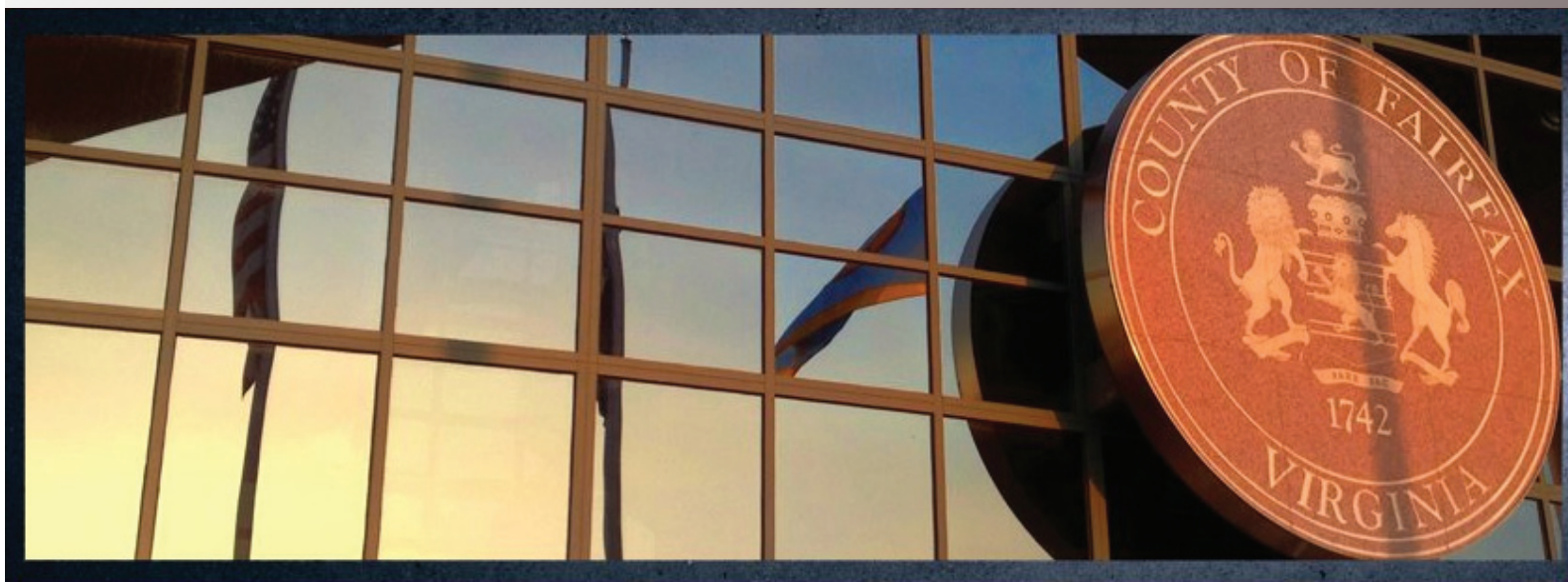


Communicable Disease Summary 2013



FAIRFAX COUNTY HEALTH DEPARTMENT
www.fairfaxcounty.gov/HD



Fairfax County Health Department 2013 Communicable Disease Summary



Dear Colleague:

This fourth edition of the Fairfax County Health Department’s Communicable Disease Summary highlights the reportable diseases that most impacted the Fairfax community in 2013. Each year, the Communicable Disease/Epidemiology Unit investigates thousands of reports of suspected communicable diseases, in partnership with local public health system partners such as the healthcare community, laboratories, public safety professionals, schools and institutions of higher education, the Virginia Department of Health, and other agencies to promptly identify, prevent, control and monitor diseases in the community.

Communicable disease surveillance, prevention, and control are core activities of the Fairfax County Health Department. As a critical partner and contributor to this core public health function, this report is intended to provide you and your clinical staff with information and practical guidance that we believe will help mitigate the potential impact of communicable diseases in our community.

The effectiveness of public health communicable disease investigations often depends on the timeliness of notification. Prompt reporting by clinicians can dramatically impact the course of these investigations and help to limit the spread of illness because Health Department staff are able to ensure the early implementation of appropriate infection control measures and facilitate laboratory testing. Staff are also able to conduct timely epidemiologic studies to determine the source of illness or perform contact tracing to identify exposed individuals when time-sensitive interventions such as antibiotic and vaccine prophylaxis are still indicated.

We thank you for your contributions and look forward to your continued partnership and support in ongoing efforts to improve the health and well-being of the Fairfax community.

Sincerely,

Gloria Addo-Ayensu, MD, MPH
Director of Health

Table of Contents

Disease Summary2

Highlighted Diseases

Meningococcal Disease.....3

Pertussis.....4

Hepatitis A5

Influenza6

Tuberculosis7

HIV/AIDS.....8

Sexually Transmitted Diseases.....9

Rabies..... 10

Lyme & Tickborne Diseases 11

West Nile Virus..... 12

Outbreak Summary 13

CD/Epi Unit Description & Contact Information..... 14

Reporting Information.....Insert

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The mission of the Fairfax County Health Department is to protect, promote and improve health and quality of life for all in our community.

**Table 1. Reported cases of selected communicable diseases
Fairfax County 2004-2013***

Disease	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	5 year average (2008-2012)
AIDS	66	59	72	74	69	65	62	51	57	48	60.8
Amebiasis	4	12	10	9	17	7	5	4	12	9	9.0
Brucellosis	1	1	0	0	0	0	0	0	0	2	0.0
Botulism, infant	0	0	0	0	0	1	0	1	0	0	0.4
Campylobacteriosis	80	91	93	83	101	121	105	93	98	108	103.6
Chikungunya		0	0	0	0	0	1	0	0	2	0.2
Chlamydia trachomatis infection	924	1284	1272	1310	1577	1572	1590	1800	2167	2262	1741.2
Cryptosporidiosis	6	4	7	5	13	19	17	24	26	33	19.8
Cyclosporiasis	1	0	0	0	0	0	0	0	0	0	0.0
Dengue fever	-	-	-	8	2	0	3	7	7	5	3.8
Escherichia coli infection, Shiga toxin-producing [£]	4	21	31	30	59	27	27	13	12	13	27.6
Ehrlichiosis/Anaplasmosis	0	2	2	2	11	1	7	17	6	11	8.4
Giardiasis	92	86	83	100	78	93	110	52	59	69	78.4
Gonorrhea	201	229	120	88	224	216	205	210	240	311	219
Haemophilus influenzae, invasive	1	4	3	2	6	9	8	13	8	11	8.8
Hansen's Disease (Leprosy)	0	0	1	0	0	0	1	1	0	0	0.4
Hepatitis A, acute	28	34	20	24	24	10	8	0	14	8	11.2
Hepatitis B, acute	6	6	6	8	10	5±	1	4	1	4±	4.2
HIV infection	103	125	149	121	126	105	113	108	123	127	115
Influenza-associated mortality (less than age 18)	0	0	0	0	0	1	0	1	0	0	0.4
Lead, elevated blood levels	60	28	41	16	26	33	31	21	18	19	25.8
Legionellosis	6	3	5	3	9	7	7	9	5	13	7.4
Listeriosis	3	3	3	2	2	0	0	4	5	7	2.2
Lyme disease	1	10	102	208	191	260	256	146	149	260	200.4
Malaria	16	7	17	21	13	16	19	29	28	16	21.0
Measles	0	0	0	0	0	0	0	0	0	0	0.0
Meningococcal disease (Neisseria meningitidis)	2	2	4	1	1	1	2	2	0	2	1.2
Mumps	0	0	6	5	2	0	3	0	2	0	1.4
Pertussis	67	41	40	13	39	31	33	55	55	33	42.6
Q fever	0	0	0	0	0	0	1	0	0	1	0.2
Rabies, human	0	0	0	0	0	1	0	0	0	0	0.2
Salmonellosis	188	173	152	187	165	111	147	123	106	127	130.4
Shigellosis	43	30	27	49	25	26	37	26	16	29	26.0
Spotted fever rickettsiosis	7	8	11	5	9	6	11	20	26	23	14.4
Staphylococcus aureus infection, invasive (MRSA)	-	-	-	12	97	52	51	91	96	96	77.4
Streptococcus disease, Group A, invasive	0	8	11	13	11	14	15	34	14	16	17.6
Streptococcus pneumoniae, invasive	4	4	8	1	6	3	8	5	6	6	5.6
Syphilis, early stage	15	31	36	33	34	37	39	34	60	64	40.8
Toxic Substances Investigation ^α	3	1	6	10	17	21	26	20	19	24	20.6
Trichinellosis	0	0	0	0	0	0	0	0	2	0	0.4
Tuberculosis	95	93	120	108	98	86	87	82	92	59	89.0
Typhoid fever	5	10	7	10	8	2	6	4	2	6	4.4
Varicella (Chickenpox)	86	211	301	180	155	64	59	56	87	61	84.2
Vibrio infection (non-cholera)	3	3	4	5	4	0	5	6	5	3	4.0
West Nile infection	1	0	3	1	1	1	2	1	8	3	2.6
Yersiniosis	0	1	1	2	2	1	1	0	0	1	0.8
Total	2122	2625	2774	2749	3232	3025	3109	3172	3630	3894	3033.2

* Unless otherwise indicated, all communicable disease data in this report are primary surveillance data from the Fairfax County Health Department and the Virginia Department of Health.

£ A more restrictive case definition for Escherichia coli infection, Shiga toxin-producing was implemented in 2011.

± Includes two case of perinatal Hepatitis B (2009, 2011, and 2013).

α Toxic substances investigations includes arsenic, asbestos, elevated levels of cadmium, elevated levels of carbon monoxide, elevated levels of mercury, and pesticide poisoning.

- Not a reportable illness during the year listed.

Meningococcal Disease

Background

Meningococcal disease is an acute, potentially severe illness caused by the aerobic, gram-negative diplococcus, bacterium *Neisseria meningitidis*. Since the introduction of the *Haemophilus Influenzae* type B and pneumococcal vaccine for infants, *Neisseria meningitidis* has been the leading cause of bacterial meningitis in children in the U.S. Meningococcal conjugate vaccines are believed to give the best protection from disease and are more effective in young children. Unfortunately, no U.S. licensed vaccine protects against meningococcal serogroup B which causes about one third of all meningococcal disease in the United States.¹ Although incidence of meningococcal disease is low in Fairfax County and the rest of Virginia, the severity and public health implications of the disease make it a high priority communicable disease investigation.

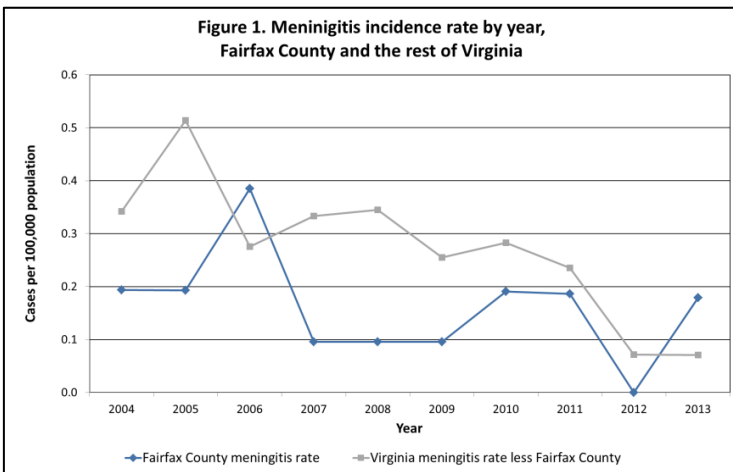
Fairfax Data

- Over the past ten years, the incidence of reported meningococcal disease in Fairfax County has fluctuated but remained relatively consistent with the rest of Virginia (Figure 1). Over the past ten years, only 17 cases have been reported in Fairfax County. In 2013, two of the seven cases reported in Virginia were Fairfax County residents.
- Meningococcal disease occurs throughout the year; however, the incidence is highest in the late winter and early spring. Since 2005, 60% of cases reported in Fairfax County have had disease onset in the five-month period from November-March.
- Between 2005 and 2013, 57% of all reported cases of meningococcal disease in Fairfax County were less than 25 years of age, with 27% falling between 18 and 24 years of age. Seven percent of cases were found among individuals less than 1 year of age, which is the age group considered as the highest risk for complications.²
- Outbreaks of meningococcal disease are rare in Fairfax County as well as Virginia. Over the last five years, only one outbreak has been reported in Virginia, a 2010 outbreak associated with a private group gathering.

Clinician Pearls

- Immediately report all suspect cases of meningococcal disease cases (including all gram negative diplococci stains) to FCHD for public health action and for guidance regarding the need for chemoprophylaxis.
- A new serogroup B meningococcal vaccine is currently categorized as an investigational new drug and not yet approved by FDA for use. The vaccine has shown a robust short term efficacy after two doses, therefore has received recent approval under an Investigational New Drug application to help control several college campus outbreaks.³
- ACIP recommends meningococcal vaccination for the following groups (full recommendations can be found at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6202a1.htm>):⁴
 - Routine vaccination of adolescents aged 11 through 18 years
 - Routine vaccination of persons aged ≥ 2 months at increased risk for meningococcal disease
 - Persons aged ≥ 2 months with certain medical conditions such as anatomical or functional asplenia or complement component deficiency
 - Special populations such as unvaccinated or incompletely vaccinated first-year college students living in residence halls, military recruits, or microbiologists with occupational exposure
 - Persons aged ≥ 9 months who travel to or reside in countries in which meningococcal disease is hyperendemic or epidemic, particularly if contact with the local population will be prolonged.
 - Vaccination of persons in at-risk groups to control outbreaks.

Figure 1. Meningitis incidence rate by year, Fairfax County and the rest of Virginia



Contacts Considered for Prophylaxis (ideally <24 hours after identification of the index patient) Reference-MMWR⁵

Personal Contacts

- Household members
- Daycare center classmates
- Teachers who may have been exposed to vomitus or nasopharyngeal secretions
- Persons who had intimate contact with the patient's oral secretions through kissing or sharing of food, drink, utensils, cups/bottles, cigarettes, lip gloss/lip balm, etc.
- Sharing of toys among infants and toddlers, shared office space, car pools, and other shared, enclosed spaces may also need to be considered

Healthcare Contacts

Prophylaxis is not routinely recommended for medical personnel attending a case except for those who had intimate exposure to the case (mouth-to-mouth resuscitation, intubation, or suctioning) prior to or less than 24 hours after the initiation of antibiotic prophylaxis.

Prophylaxis Recommendations can be found at:

<http://www.cdc.gov/mmwr/PDF/rr/rr5407.pdf>

¹ Immunization Action Coalition. Meningococcal: Questions and Answers. Retrieved from <http://www.immunize.org/catg.d/p4210.pdf>.

² Red Book: 2012 Report of the Committee on Infectious Disease. (29th edition). American Academy of Pediatrics. 2012.

³ CDC. (updated: 2015, January 26). Serogroup B Meningococcal Vaccine & Outbreaks. Retrieved from <http://www.cdc.gov/meningococcal/outbreaks/vaccine-serogroupB.html>.

⁴ CDC. Prevention and Control of Meningococcal Disease: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2013;62(RR-02):1-22.

⁵ CDC. Prevention and Control of Meningococcal Disease: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2005;54(RR-07):13-16.

Hepatitis A

Background

Historically, acute hepatitis A was one of the most frequently reported vaccine-preventable diseases in the pre-vaccine era. Since the licensure of the vaccine in 1995, rates of hepatitis A rates have declined precipitously and are now the lowest ever recorded. It is expected that these rates will continue to decrease with the 2006 ACIP recommendation to expand coverage of the hepatitis A vaccine by including it in the nationwide routine childhood vaccination schedule. In 2012, a total of 1,562 cases of acute hepatitis A were reported in the U.S. (0.5 cases per 100,000 population). The most common risk behavior associated with hepatitis A cases reported in 2012 is travel outside of the United States or Canada (12.7%).^{10,11,12}

Fairfax Data

- Hepatitis A rates in Fairfax County have been consistently higher than the rate seen across the rest of the state over the past ten years. In 2013, a total of 8 cases of hepatitis A were reported in Fairfax County, equivalent to an incidence rate of 0.7 cases per 100,000 population, compared to 0.4 cases per 100,000 seen throughout the rest of the state of Virginia during the same year (Figure 4).
- Between 2010 and 2013, those 0-19 years of age accounted for 46.2% of all reported hepatitis A cases in Fairfax County. Adults 20-44 years of age accounted for an additional 33.1% of cases.
- The most commonly reported risk factor reported among Fairfax County cases between 2010-2013 was travel outside of the U.S. or Canada, which was reported in 62.1% of cases. This was significantly higher than what was seen across the U.S. (12.9% in 2012).^{11,12} Person in household with travel outside the U.S or Canada (39.3%) and more than 1 sexual partner (37.9%) were two additional risk factors reported most commonly among cases.

Clinician Pearls

- To improve the predictive value of a positive IgM anti-HAV test, clinicians should limit laboratory testing for acute HAV infection to persons with clinical findings typical of hepatitis A or to persons who have been exposed to settings where HAV transmission is suspected.
- ACIP recommends hepatitis A vaccination for the following groups (full recommendations can be found at <http://www.cdc.gov/mmwr/PDF/rr/rr5507.pdf>):
 - All children at age 1 year (i.e., 12–23 months).
 - Children and adolescents ages 2–18 who live in states or communities where routine Hepatitis A vaccination has been implemented because of high disease incidence.
 - Persons traveling to or working in countries that have high or intermediate rates of Hepatitis A.
 - Men who have sex with men.
 - Users of illegal injection and noninjection drugs.
 - Persons who have occupational risk for infection, chronic liver disease, or clotting-factor disorders.
 - Household members and other close personal contacts of adopted children newly arriving from countries with high or intermediate hepatitis A endemicity.¹³
- Promptly report suspected and confirmed hepatitis A cases to FCHD to enable the rapid chemoprophylaxis of exposed contacts.

Figure 4. Hepatitis A incidence rate by year, Fairfax County and the rest of Virginia

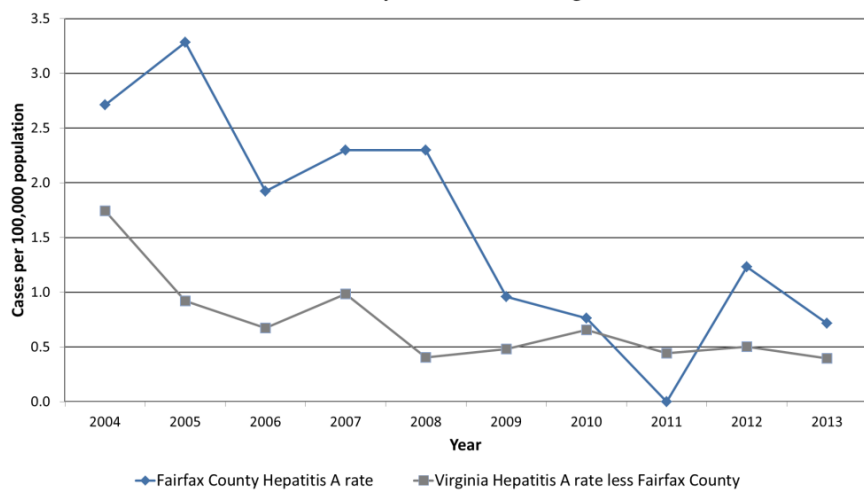


Table 2. Percent of hepatitis A cases exhibiting clinically compatible symptoms, Fairfax County 2010-2013

Symptom	% of Cases with Symptom
Diarrhea	92.6%
Arthritis	74.1%
Itching	65.4%
Light/clay-colored stools	60.0%
Sweats	57.7%
Vomiting	51.9%
Muscle aches	51.9%
Chills	50.0%
Weight loss	42.3%
Abdominal pain/cramps	33.3%
Jaundice	29.6%
Fever	29.6%
Dark-colored urine	18.5%

¹⁰ Red Book: 2012 Report of the Committee on Infectious Disease. (29th edition). American Academy of Pediatrics. 2012.

¹¹ CDC. (updated: 2009, June 2). Guidelines for Viral Hepatitis Surveillance and Case Management. Retrieved from <http://www.cdc.gov/hepatitis/Statistics/SurveillanceGuidelines.htm#hepa>. 4

¹² CDC. (updated: 2015, January 5). Surveillance for Viral Hepatitis – United States, 2012. Retrieved from <http://www.cdc.gov/hepatitis/Statistics/2012Surveillance/Commentary.htm#hepa>.

¹³ CDC. Prevention of hepatitis A through active or passive immunization. Recommendations of the ACIP. MMWR 2006;55(No. RR-7).

Pertussis

Background

The incidence of pertussis in the United States is cyclical, with peaks every 3–5 years. A primary reason for the continued circulation of *Bordetella pertussis* is waning immunity after completion of the childhood vaccination series, which leaves adolescents and adults susceptible. Pertussis vaccine is effective; however age appropriate vaccine coverage may not preclude individuals from disease. Up to 80% of immunized household contacts of symptomatic cases acquire pertussis infection, ranging from asymptomatic infection to classic pertussis.⁶ U.S. vaccination coverage rates has increased for the Tdap booster vaccine to 86.0% among adolescents and 17.2 % among adults.^{7,8}

Fairfax Data

- In 2013, a total of 33 cases of pertussis were reported in Fairfax County, equivalent to an incidence rate of 3.0 cases per 100,000 population, which was significantly less than the 5.4 cases per 100,000 seen throughout the rest of the state of Virginia during the same year (Figure 2).
- Two outbreaks of pertussis were investigated in 2013, both in schools.
- Of the 2012-2013 Fairfax County pertussis cases with known vaccine history, 67.2% were considered fully vaccinated, while 10.3% were considered partially vaccinated. Only 13 cases (22.4%) reported no vaccination history, with the most common reason cited for no vaccination being parent/patient refusal.
- Between 2009 and 2013, infants aged <1 year, who are at greatest risk for severe disease and death, accounted for 12.1% of all reported pertussis cases in Fairfax County. Children 1-10 years of age accounted for an additional 30.3% of cases. The remaining 57.6% of cases occurred among adolescents and adults.

Clinician Pearls

- Protection of susceptible infants is a primary objective of public health pertussis control interventions. To reduce pertussis infections, ACIP recommends a Tdap booster for the following:
 - Pregnant mothers who have not already received Tdap booster should receive a single Tdap dose, preferably between 27 and 36 weeks gestation. If not administered during pregnancy, Tdap should be given immediately postpartum. Close contacts to the infant are also recommended for immunization (e.g. siblings, grandparents, babysitters).
 - Children aged 7 through 10 years who are not fully vaccinated against pertussis should receive a single dose of Tdap. If additional doses of tetanus and diphtheria toxoid-containing vaccines are needed, vaccinate according to ACIP catch-up guidance, with Tdap given as the first dose.
 - Children 11-18 years of age should receive a single dose of vaccine, with preferred administration at 11 -12 years of age. Children 13-18 years of age who have not received Tdap should receive vaccine at the next patient encounter or sooner, if close contact with infants will occur.
 - Adults 19 years of age and older who have not received a dose of Tdap should receive vaccine as soon as feasible. Tdap can be administered regardless of the interval since the last Td booster.
 - Healthcare personnel who have not received Tdap as an adult should receive a single dose, regardless of the interval since the last Td dose.⁹
- Culture and/or PCR of nasopharyngeal specimens should be conducted for all suspected pertussis cases within 3 weeks of cough onset. Currently, serologic testing is of limited benefit for pertussis diagnosis and is not recommended.
- Promptly report suspected and confirmed pertussis cases to FCHD to enable the rapid chemoprophylaxis of exposed contacts.

Figure 2. Pertussis incidence rate by year, Fairfax County and the rest of Virginia

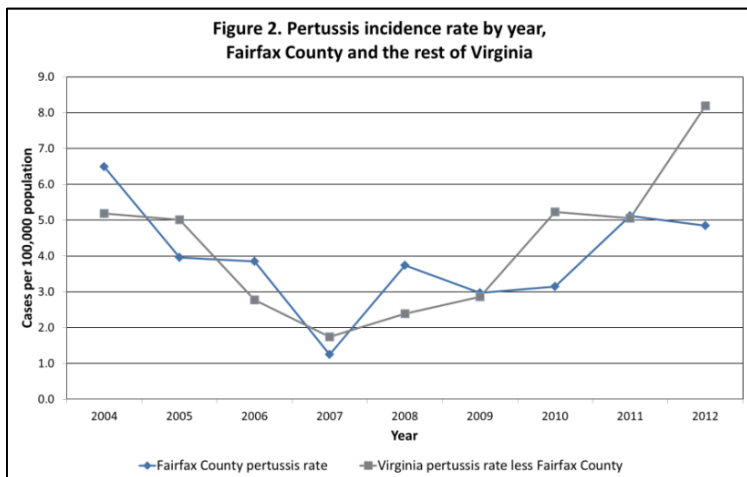
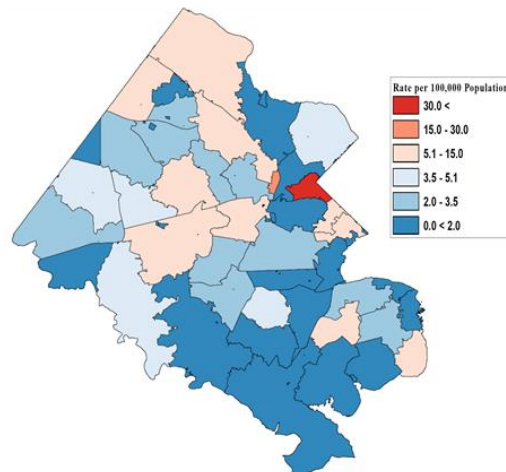


Figure 3. Rate (per 100,000 population) of Reported Cases of Pertussis by zip code, Fairfax County 2009-2013



⁶ Red Book: 2012 Report of the Committee on Infectious Disease. (29th edition). American Academy of Pediatrics. 2012.

⁷ CDC. National, Regional, State and Selected Local Area Vaccination Coverage Among Adolescents Aged 13-17 Years – United States, 2013. MMWR 2014;63(29):625-633.

⁸ CDC. Vaccination Coverage Among Adults, Excluding Influenza Vaccination – United States, 2013. MMWR 2015;64(04):95-102.

⁹ CDC. Updated recommendations for use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis (Tdap) vaccine from the Advisory Committee on Immunization Practices (ACIP), 2010. MMWR 2011;60:13-15.

Influenza

Background

The 2013-2014 U.S. influenza season peaked in the last week of December 2013 and was the first influenza season since the 2009 H1N1 pandemic in which pH1N1 viruses predominated. The season was characterized by lower levels of outpatient illness and mortality than recent previous seasons, but higher rates of hospitalization among adults aged 50–64 years. U.S. virologic surveillance indicated that influenza A (pH1N1) viruses predominated, with co-circulation of influenza B viruses and influenza A (H3N2) viruses. CDC's estimates for influenza vaccine effectiveness illness were consistent across all age groups. The estimated overall vaccine effectiveness against influenza A (pH1N1) viruses was 62 percent.^{14,15}

Fairfax Data

- In Fairfax County and Virginia, influenza surveillance is conducted each October through May through surveillance of disease activity at the community level. Multiple influenza surveillance approaches are utilized, including healthcare provider aggregate rapid influenza testing reports, emergency department syndromic surveillance, sentinel provider virologic surveillance, and pediatric death reporting. Local data indicate that influenza epidemiology in Fairfax County and Virginia during the 2013-2014 influenza season mirrored that seen at the national level in relation to timing and virologic types.
- During the 2013-2014 season, influenza activity was categorized as widespread in Virginia for eleven weeks, beginning in the week of December 28, 2013. By comparison, Virginia reported widespread activity for thirteen weeks during the 2012-2013 influenza season.
- Emergency department utilization for influenza-like illness in Fairfax County remained high for much of the 2013-2014 influenza season, with activity peaking at 5.4% the week of January 11, 2014, which was significantly greater than the national influenza baseline level of 2.4% (Figure 5).
- Virginia virologic surveillance, which includes specimens submitted by four Fairfax County sentinel providers, identified co-circulation of influenza A (H3), influenza A (pH1N1), and influenza B viruses.
- Only one influenza-like illness outbreak was reported in Fairfax County during the 2013-2014 season. This outbreak was associated with a school and influenza A was found to be the causative agent by rapid testing.

Clinician Pearls

- The Advisory Committee on Immunization Practices recommends routine influenza vaccination for all persons aged 6 months and older. Vaccination efforts should continue throughout the influenza season as the duration of the influenza season varies and disease activity might not peak until February or March.
- All healthcare facilities should have a comprehensive, up-to-date healthcare worker immunization policy for influenza and all other vaccine preventable diseases. This policy should encompass all employees and volunteers who are at risk of exposure to or possible transmission of vaccine preventable diseases. To assist in ensuring appropriate documentation of immunity, a one-page summary of the Advisory Committee on Immunization Practices recommendations for healthcare worker immunization is available at <http://www.immunize.org/catg.d/p2017.pdf>.
- There are new formulations available in the 2014-2015 season including quadrivalent injectable and nasal vaccines, egg-free vaccines, and vaccine delivery systems that use a micro-needle. All of these options are considered effective in providing influenza immunizations.
- FCHD provides free influenza vaccine to all Health Department clients through our five district offices. Vaccine is also available to the general public for a nominal fee. Clients may call 703-246-2411 to confirm service hours and locations.
- Influenza-associated deaths in children < 18 years of age and all suspected institutional outbreaks of influenza should be immediately reported to the FCHD.

Figure 5. Percentage of visits for influenza-like illness in emergency department, Fairfax County, 2009-2013

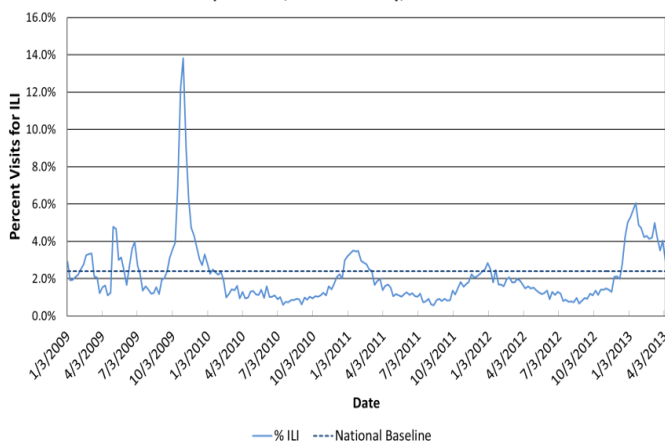
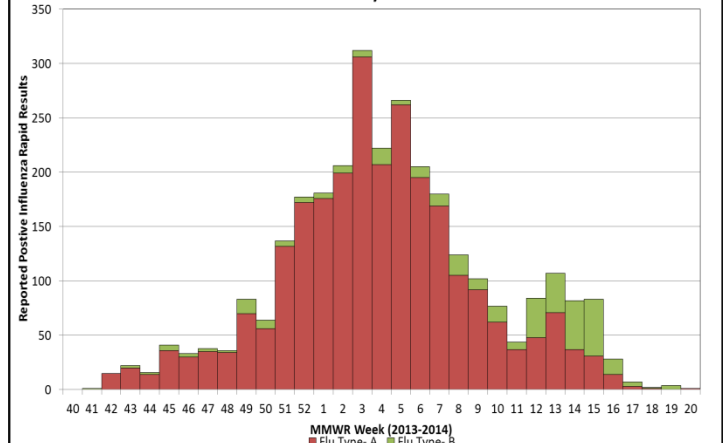


Figure 6. Positive rapid results reported to FCHD by influenza type, Fairfax County 2013-2014



¹⁴ CDC. (2014 February 21). Interim estimates of 2013-14 seasonal influenza vaccine effectiveness — United States, February 2014. MMWR 2014;63(No. RR-07):137-142.

¹⁵ CDC. (2014 June 6). Influenza activity — United States, 2013-14 season and composition of the 2014-15 influenza vaccines. MMWR 2014;63(No. RR-22):483-490.

Tuberculosis

Background

In 2013, the reported incidence of TB in the U.S. was 3.0 cases per 100,000 population, representing a decrease of 4.2% from 2012. Since the 1992 TB resurgence peak in the U.S., the number of TB cases reported annually had decreased by 64%. This downward trend in TB incidence has been driven primarily by a decrease in cases among U.S.-born persons.¹⁶ However, the global burden of TB disease remains enormous and the proportion of total cases occurring in foreign born individuals in the US has been increasing since 1993.¹⁷

Fairfax Data

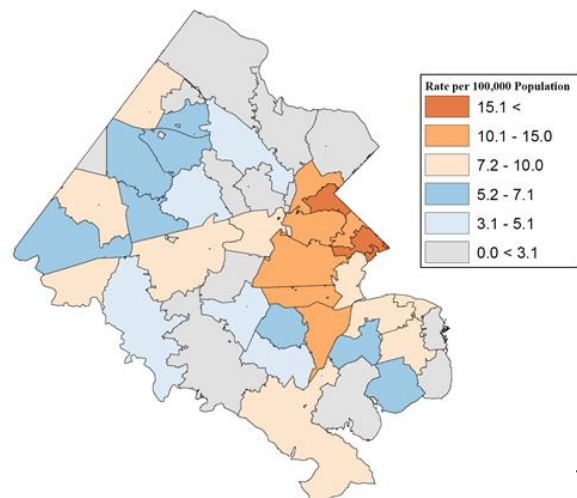
- In Fairfax County, the TB incidence rate has remained relatively stable over the last decade and has been consistently higher than the incidence rate for the rest of Virginia. In 2013, the Fairfax County TB incidence rate was 5.3 cases per 100,000, three times higher than the rate for the rest of Virginia (1.7 per 100,000), and almost double the U.S. rate (3.0 per 100,000).
- As seen in Table 3, the distribution of TB cases by country of origin reflects immigration patterns among people settling in Fairfax County. As in the U.S. in Fairfax County, there is a predominance of foreign-born individuals among TB cases. Between 2009 and 2013, approximately 90% of incident TB cases identified in Fairfax County were among foreign-born persons. The most common countries of origin for foreign-born cases identified between 2009 and 2012 were India (13.1%) and Vietnam (12.8%). Among 2013 cases, fifty percent of infected individuals had resided in the U.S. for 5 years or less at the time of diagnosis.
- In 2013, 14.6% of Fairfax County TB cases exhibited isoniazid resistance, and one exhibited multi-drug resistance (MDR) defined as no previous history to TB and resistance to at least isoniazid and rifampin. Between 2005 and 2013, a total of 10 cases of MDR TB were identified in Fairfax County. No cases of XDR-TB were reported in 2013 in Fairfax County.
- Six cases of TB/HIV co-infection were reported between 2012 and 2013 in Fairfax County.

Clinician Pearls

- Consider TB in the differential diagnosis for foreign-born individuals presenting with compatible signs and symptoms (e.g., cough, fever, night sweats, or weight loss).
- In addition to the Tuberculin Skin Test (TST), interferon-gamma release assays (IGRAs) are also available to aid in the diagnosis of TB:
 - Quantiferon TB Gold in Tube (QFT-GIT) is available through private laboratories and the Fairfax County Health Department.
 - T-Spot. *TB* is available through the manufacturer, Oxford Immunotec.
- When using IGRAs, remember the following:
 - A negative IGRA is similar to a negative TST, it does not rule out latent or active tuberculosis infection; and
 - TST is the test of choice for children less than 5 years of age as the IGRAs are not validated for this population.
- The new Core Curriculum on Tuberculosis: What the Clinician Should Know is available online from the CDC at <http://www.cdc.gov/tb/education/corecurr/index.htm>.
- Report all suspected tuberculosis cases to FCHD, regardless of location of infection or treatment status. FCHD will conduct contact investigations to identify exposed individuals and provide appropriate follow-up. Treatment for active Tuberculosis is provided without cost to the client through the Health Department.

Country	No. of cases	Percent
India	53	13.1%
Vietnam	52	12.8%
Ethiopia	40	9.9%
United States	35	8.6%
Republic of Korea	26	6.4%
Philippines	23	5.7%
Remaining 43 countries	177	43.6%

Figure 7. Rate (per 100,000 population) of reported cases of TB by zip code, Fairfax County 2009-2013



¹⁶ CDC. *Reported Tuberculosis in the United States, 2011*. Atlanta, GA: U.S. Department of Health and Human Services, CDC, October 2012.

¹⁷ CDC. Trends in Tuberculosis -- United States, 2012. *MMWR* 2013;62(11): 201-20.

HIV/AIDS

Background

Annual HIV incidence rates in the U.S. have remained relatively stable in recent years, averaging 15.9 cases per 100,000 population between 2008 and 2011. However, as treatment modalities and access to services have improved, there has been an increase in the number of individuals living with HIV and AIDS. At the end of 2010, the estimated U.S. prevalence rate of diagnosed HIV infection was 282.2 per 100,000 population, a 5.1% increase compared to 2008. Specific demographic groups continue to be disproportionately affected by HIV and AIDS at the national level, with non-Hispanic blacks facing the highest burden of disease, followed by Hispanics. By risk group, men who have sex with men (MSM) are the most severely affected.¹⁸

Fairfax Data

- HIV incidence in Fairfax County increased during the middle of the last decade, peaking at 149 cases in 2006. Over the last five years, incidence has fluctuated with approximately 115 cases per year. Approximately 80% of all incident Fairfax County HIV cases identified between 2011 and 2013 were male and the most common age at diagnosis was 25-34 years (32.4% of cases).
- In 2013, 127 newly-diagnosed HIV cases were identified in Fairfax County, equivalent to a rate of 11.4 per 100,000 population. This compares favorably with the incidence rate for the rest of Virginia of 14.5 per 100,000 population.
- The 2013 HIV incidence rate for non-Hispanic blacks is 9 times greater than that seen among white residents. Hispanics were also disproportionately affected, with an incidence rate nearly 2 times that seen among whites (Figure 8).
- In 2013, almost half (48.0%) of the new HIV diagnoses in Fairfax County were among MSM. Other high-risk groups included adults reporting heterosexual contact with a high-risk partner and intravenous drug users (Figure 9).
- At the end of 2013, 2,897 Fairfax County residents were living with HIV or AIDS, equivalent to a prevalence rate of 259.0 per 100,000 population. This represents a 3.7% increase since 2012, but remains lower than the 2013 prevalence rate for the rest of Virginia (311.4 per 100,000 population). More than 43.1% the Fairfax residents living with HIV or AIDS at the end of 2013 were non-Hispanic blacks, and nearly 14.7% were Hispanics. Non-Hispanic blacks and Hispanics account for 9.2% and 15.6% of the Fairfax County population, respectively.¹⁹ Almost half of all individuals living with HIV or AIDS were MSM. Over 1,480 met the surveillance criteria for AIDS.

Clinician Pearls

- The CDC recommends routine HIV screening for all patients aged 13-64 years in all health care settings. Screening should be performed regardless of whether the patient is known or suspected to have behavioral risks for infection.
- All pregnant women should be tested for HIV infection as early during pregnancy as possible. A second test during the third trimester, preferably at <36 weeks' gestation, should be considered for all pregnant women and is recommended for women known to be at high risk for acquiring HIV.²⁰
- In 2008, Virginia adopted an "opt-out" screening process for HIV testing. Under this process, consent for HIV testing is inferred unless the patient verbally declines. A medical care provider must inform the patient that the test is planned, provide information about the test, and advise the patient of their right to decline the test. A specific written consent form is not necessary; general consent for medical care is sufficient. If a patient declines an HIV test, clinicians must document the declination in the patient's medical record.
- Free, confidential HIV testing is available at each of the five FCHD district offices. Harm reduction counseling before and after testing is included. Clients may call 703-246-2411 to confirm service hours and locations.

Figure 8. HIV incidence rates by race and ethnicity, Fairfax County, 2004-2013

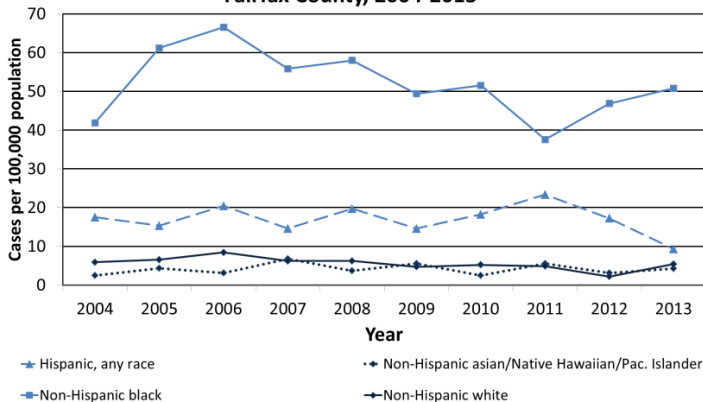
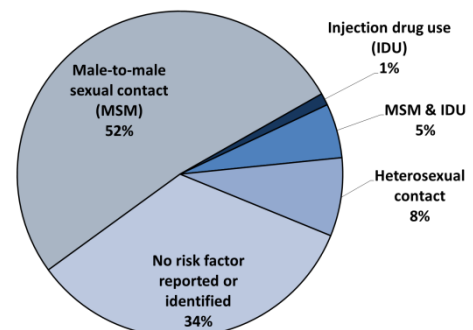


Figure 9. Risk factors reported among newly diagnosed HIV cases, Fairfax County 2011-2013 (n=334)



¹⁸ CDC. (February 2013). *HIV Surveillance Report, 2011*; vol. 23. Retrieved June 1, 2013 from <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/>.

¹⁹ U. S. Census Bureau. (2010). *American FactFinder: Fairfax County, VA*. Retrieved June 11, 2015 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

²⁰ CDC. Sexually Transmitted Diseases Treatment Guidelines, 2010. *MMWR* 2010; 59 (No. RR-12).

Sexually Transmitted Diseases

Background

CDC's new estimates show that there are a total of 110 million sexually-transmitted infections in the United States with about 20 million new infections each year costing the American healthcare system nearly \$16 billion in direct medical costs alone. Young people (15-24) represent 50% of all new cases.²¹ Each of these infections is a potential threat to an individual's immediate and long-term health especially if not diagnosed and treated early. The most commonly reported sexually transmitted diseases in the U.S. in 2013 were chlamydia (1,401,906) and gonorrhea (333,004). There were 17,375 new syphilis cases reported in 2013.^{21,22}

Fairfax Data

- In Fairfax County, the incidence rates for chlamydia, gonorrhea, and syphilis have increased in recent years, yet both are still below the incidence rate seen throughout the rest of the state of Virginia (see detailed information in Table 4 below).
- In 2013, 64 total early syphilis cases were identified in Fairfax County. Among Fairfax County early syphilis cases identified between 2011-2012, 41.7% were co-infected with HIV.
- When examining the gender of Fairfax STD cases, significant differences were noted when comparing the diseases. In 2013, screening during pregnancy and gynecological exams attributed to the fact that females counted for twice as many chlamydia cases than males, while twice as many cases of gonorrhea were males than females. Reflecting national trends, the majority of syphilis cases were males (93.7%), 75% of which reported to be men who have sex with men (2012 data).
- Nearly 86% of all combined Fairfax County chlamydia, gonorrhea, and syphilis cases occurred among individuals 12 – 34 years of age. The most common age at diagnosis was 15 – 24 years (50.5% of cases).
- In 2013, the County incidence combined STD incidence rate for non-Hispanic blacks (442.3 per 100,000 population) was more than six times that seen among white residents (67.3 per 100,000). The incidence rate among Hispanics (149 per 100,000) was more than double that seen among whites.

Clinician Pearls

- CDC recommends that all persons who have syphilis be tested for HIV infection. Given the high prevalence of HIV in the National Capital Region and the high rate of HIV co-infection among Fairfax County syphilis cases individuals who have primary syphilis should be retested for HIV three months after the first HIV test result was negative.²²
- Promptly report suspected syphilis cases to FCHD. For all early syphilis cases, FCHD will conduct partner notification and facilitate testing and/or treatment for exposed individuals.
- Many sexually active men and women will get HPV at some point in their lives. This means that everyone is at risk for the potential outcomes of HPV and many may benefit from the prevention that the HPV vaccine provides. HPV vaccines are routinely recommended for 11 or 12 year old boys and girls. CDC also recommends that all teen girls and women through age 26 get vaccinated, as well as all teen boys and men through age 21 (and through age 26 for gay, bisexual, and other men who have sex with men).
- As many individuals with STD's may not present with symptoms, CDC recommends:²³
 - All adults and adolescents should be tested at least once for HIV.
 - Annual screening chlamydia screening for all sexually active women age 25 and under, as well as older women with risk factors such as new or multiple sex partners.
 - Yearly gonorrhea screening for at-risk sexually active women and
 - Syphilis, HIV, chlamydia, and hepatitis B screening for all pregnant women, and gonorrhea screening for at-risk pregnant women at the first prenatal visit, to protect the health of mothers and their infants.
 - Trichomoniasis screening should be conducted at least annually for all HIV-infected women.
 - Screening at least once a year for syphilis, chlamydia, gonorrhea, and HIV for all sexually active gay men, bisexual men, and other men who have sex with men (MSM).

Table 4. Rates and percentages of cases of reportable sexually transmitted diseases, Fairfax County 2013

	Rates per 100,000 population					Percentages								
	Jurisdiction		Rates in Fairfax County, by race			Gender		Age at Diagnosis						
	Fairfax County	VA (total)	Non-Hispanic White	Non-Hispanic Black	Hispanic	Male	Female	<15	15 – 24	25 – 34	35 – 44	45 – 54	55 – 64	65 +
Chlamydia	199.4	413.2	56.3	340.1	152.4	34.5	65.4	0.7	59.3	31.3	6.3	2	0.3	0.1
Gonorrhea	27.8	86.7	9.2	73.9	11.4	66.9	33.1	0	42.1	34.7	11.9	8.04	1.9	1.3
TES	5.7	8.2	4.3	12.5	8.7	93.75	6.25	0	15.6	31.3	25	21.9	4.7	1.6

²¹ CDC. Sexually Transmitted Disease Surveillance 2013. Atlanta: U.S. Department of Health and Human Services; 2014.

²² CDC Fact Sheet. Reported STDs in the United States. 2013 National Data for Chlamydia, Gonorrhea, and Syphilis. 2014. Centers for Disease Control and Prevention. Retrieved from <http://www.cdc.gov/nchstp/newsroom/docs/std-trends-508.pdf>.

²³ CDC. Sexually transmitted diseases treatment guidelines, 2015. MMWR 2015; 64 (1-137).

Rabies

Background

Over the last 100 years, rabies in the United States has changed dramatically. Before 1960, the majority of animal cases reported occurred in domestic animals whereas, currently more than 90% of all animal cases reported to the CDC occur in wildlife. The principal rabies hosts today are wild carnivores and bats.²⁴ Human rabies infection is now rare, with an average of only two to three U.S. cases identified each year.²⁵ Rabies prophylaxis is nearly 100% successful.²⁶ **Prophylaxis is indicated for any bite, scratch, or other situation where saliva or central nervous system tissue from a potentially rabid animal enters a fresh, open wound or contacts a mucous membrane by entering the eye, mouth, or nose.**

Fairfax Data

- In 2013, the FCHD Public Health Laboratory conducted direct fluorescent antibody testing for rabies virus on 432 animals submitted by the Fairfax County Animal Control Services Division (ASD). Forty-six (10.6%) of the animals tested positive for rabies.
- Raccoons accounted for the majority of 2013 positive rabies test results (60.9%), followed by skunks (17.4%) and foxes (8.7%). These terrestrial carnivores are considered to be the highest risk species for rabies in the County. Of the 117 bats tested in 2013, only three were positive for rabies virus. Approximately 70% of all confirmed rabid animals were located within 1000 feet of a body of water.
- Although rabies is less common among domestic animals in 2013, one cat and one cow tested positive for rabies, resulting in post-exposure prophylaxis for 2 individuals.
- No human rabies cases were identified in Fairfax County in 2013. The most recent human case, a fatal infection with internationally-acquired canine rabies, occurred in 2009.
- In 2013, 1,645 human exposures to animals (primarily bites) were reported to ASD. For more than 95% of these exposures, ASD and FCHD were able to locate the offending animal for quarantine or testing, eliminating the need for rabies post-exposure prophylaxis (PEP).
- Rabies PEP was initiated in a total of 236 Fairfax County residents in 2013. Eighty-five (36.3%) of these patients did not have a rabies exposure history that met the Advisory Committee on Immunization Practices' criteria and should not have received PEP.

Clinician Pearls

- Accurate rabies exposure assessment and correct administration of post-exposure prophylaxis (PEP) are critical for preventing disease and ensuring that vaccine remains available for truly exposed individuals.
 - FCHD rabies staff members are available for consultation regarding rabies exposure assessment and PEP administration at 703-246-2433 (business hours) or 571-274-2296 (evenings and weekends).
 - An online course is available to provide clinicians with further information about rabies exposure assessment and PEP administration at <http://ideha.dhmm.maryland.gov/training/SitePages/rabies.aspx>. CME credits are available.
- Only a small percentage of individuals exposed to a potentially rabid animal will require PEP. If the offending animal can be located, PEP administration should be delayed pending the outcome of confinement or testing.
- All exposures to potentially rabid animals must be reported immediately to the Fairfax County Animal Services Division (ASD) at 703-691-2131 (Fax: 703-830-7806). ASD staff can assist with locating the exposing animal.
- PEP administration must be reported to FCHD using a Virginia Department of Health Confidential Morbidity Report (Epi-1 form) or by calling 703-246-2433.

Figure 10. Types of Errors Made in PEP Administration, Fairfax County 2013

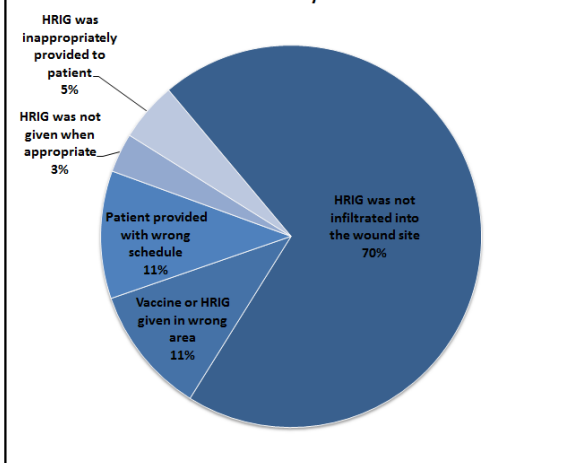
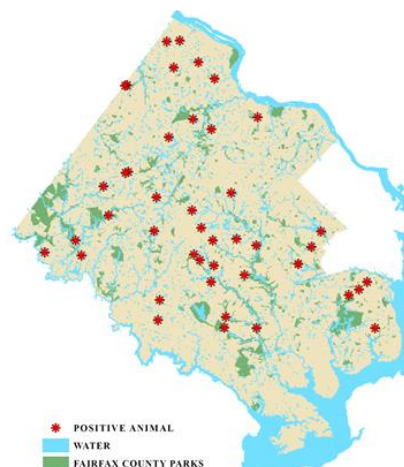


Figure 11. Confirmed Animal Rabies Cases by Location, Fairfax County 2013



²⁴ Dyer J, et al. (2013). Rabies surveillance in the United States during 2012. Journal of the American Veterinary Medical Association. 243(6): 805-815.

²⁵ CDC. (November 2012). Rabies Surveillance Data in the United States. Retrieved June 1, 2013 from <http://www.cdc.gov/rabies/location/usa/surveillance/index.html>.

²⁶ CDC. Human Rabies Prevention - United States, 2008: Recommendations of the Advisory Committee on Immunization Practices. MMWR 2008; 57(No. RR-3):1-27.

Lyme and Other Tickborne Diseases

Background

Over the last decade, the incidence of tick-borne diseases has increased steadily in the U.S. as people increasingly live, play, and work in formerly uninhabited wilderness areas where ticks and their animal hosts live. Tickborne pathogens infect tens of thousands of U.S. residents each year. The epidemiologies of specific tickborne diseases reflect the geographic distribution and seasonal activity of the transmitting tick species.²⁷ In Virginia as well as the U.S., the most commonly reported tickborne illness is Lyme disease, followed distantly by spotted fever group rickettsiosis, ehrlichiosis, and anaplasmosis.

Fairfax Data

- Tickborne disease cases are reported geographically throughout Fairfax County therefore all Fairfax County residents should be considered at risk of infection.
- After a nearly 13-fold increase in the number of reported cases of Lyme disease in Fairfax County in the early 2000s, the number of reported cases has fluctuated the last several years, with 260 cases reported in 2013.
- When examining the seasonality of Lyme disease, although reported throughout the year, the incidence is highest during the early summer months when the number and activity of nymphal *Ixodes scapularis* ticks, the primary vectors for human disease, is highest.
- The incidence of spotted-fever group rickettsiosis (including Rocky Mountain spotted fever) in Fairfax County has increased over the past decade, but has remained consistently lower than the rate for the rest of Virginia. In 2013, 23 cases of spotted fever group rickettsiosis were reported to FCHD. No deaths due to spotted fever group rickettsiosis were reported in Fairfax County in 2013.
- The incidence of ehrlichiosis and anaplasmosis in Fairfax County has fluctuated over the last decade but remained near or below the rate for the rest of Virginia. In 2013, a combined total of 11 cases of ehrlichiosis and anaplasmosis were reported to FCHD, representing a 83% increase in the burden of these two diseases compared to 2012.

Clinician Pearls

- Avoiding tick bites and promptly removing attached ticks remain the best disease prevention strategies. When prevention fails, early recognition and prompt treatment of patients with tickborne diseases can help avoid potentially severe complications. The CDC recently released the first edition of **Tickborne Diseases of the United States-A Reference Manual for Health Care Providers** which provides disease specifics with photos, identification of ticks with photos, lab and treatment information. It can be found online at <http://www.cdc.gov/lyme/resources/TickborneDiseases.pdf>.
- Maintain a high index of suspicion for Lyme and other tickborne diseases in all patients presenting with clinically compatible signs and symptoms. Note that some patients with Lyme disease never develop an erythema migrans rash.
- Laboratory testing can be an important aid in diagnosing a tickborne disease. However, Lyme disease patients tested within the first few weeks of illness may not have developed antibodies and may test negative.
- All suspected and confirmed Lyme disease cases should be reported to FCHD. For surveillance purposes, the CDC Lyme Disease case definition requires clinical and laboratory evidence of infection (i.e. 2-tier testing with EIA and Western Blot).
 - Necessary clinical evidence includes Lyme-associated signs and symptoms (e.g. erythema migrans rash, arthritis, or Bell's palsy).
 - Necessary laboratory evidence includes positive or equivocal results from ELISA (or IFA) serology and positive Western Blot IgM serology if the blood was drawn within 30 days of onset OR positive Western Blot IgG serology alone if blood was drawn more than 30 days after onset.
 - Note that the CDC case criteria are for surveillance purposes and not necessarily for clinical diagnosis.

Table 5. Infection rate of select organisms* among ticks collected by the Disease Carrying Insects Program, Fairfax County 2013

Tick Species	Distribution of collected ticks by species (n=7995)	# Submitted for Testing	% Infected	Corresponding Disease
Lone Star	53.0%	1069	0.8% <i>E. chaffeensis</i>	Ehrlichiosis
			1.5% <i>E. ewingii</i>	Ehrlichiosis
American Dog	34.9%	2710	0.0% <i>R. rickettsii</i>	Spotted-fever group rickettsiosis
Deer/Blacklegged	12.0%	403	28.8% <i>B. burgdorferi</i>	Lyme disease
Gulf Coast	0.1%	9	11.1% <i>R. parkeri</i>	Spotted-fever group rickettsiosis

* Select organisms displayed are limited to only the bacteria that are associated with the corresponding tick species.

²⁷ CDC. Diagnosis and management of tickborne rickettsial diseases: Rocky Mountain spotted fever, ehrlichiosis, and anaplasmosis – United States. MMWR 2006;55(No. RR-04).

West Nile Virus

Background

West Nile virus (WNV) was first detected in New York City in 1999. At that time, the virus had already established itself across the eastern half of the country and produced the largest epidemic of arboviral encephalitis ever experienced in the United States. Since that time, WNV has expanded to the point that it can now be found in all 48 contiguous states and has produced two additional, large nationwide epidemics in 2003 and 2012.²⁸ From its initial appearance in 1999 to the end of 2013, there have been 39,462 cases of WNV human illnesses in the US reported to CDC, including 1,663 deaths. During this same period, Virginia has reported 122 human cases with 9 deaths.

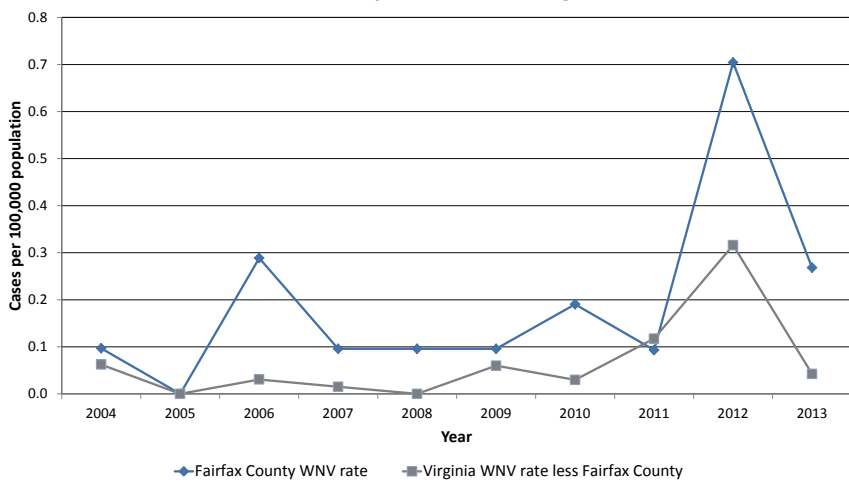
Fairfax Data

- Between 2002-2012, 37 cases of WNV (including three fatalities) have been reported in Fairfax County.
- Three cases of neuroinvasive WNV were reported in Fairfax County in 2013, which was a significant reduction in the number of WNV cases reported in the previous year (8 cases) given the nationwide outbreak in 2012.
- The Health Department's Disease Carrying Insects Program (DCIP) routinely traps mosquito's across the County from May through October. In 2013 routine mosquito season, 92,119 mosquitoes were tested in 3,614 pools. 302 pools were positive for WNV.
- The most abundant species in DCIP's surveillance collections were *Culex pipiens* and *Culex restuans* (over 77% of the total number of mosquitoes collected). Historically in Fairfax County, *Culex pipiens*, *Culex restuans*, *Culex erraticus*, *Aedes albopictus*, *Aedes vexans*, and *Anopheles punctipennis* are the species that have tested positive for WNV and are most likely to transmit WNV to humans.
- *Culex pipiens*, *Culex restuans*, and *Culex salinarius* were the only species that tested positive for WNV in Fairfax County in 2013.

Clinician Pearls

- West Nile virus (WNV) disease should be considered in any person with a febrile or acute neurologic illness who has had recent exposure to mosquitoes, blood transfusion, or organ transplantation, especially during the summer months in areas where virus activity has been reported. The diagnosis should also be considered in any infant born to a mother infected with WNV during pregnancy or while breastfeeding.
- Other arboviruses (e.g., La Crosse, St. Louis encephalitis, Eastern equine encephalitis, and Powassan viruses) should also be considered in the differential etiology of suspected WNV illness.
- All suspected and confirmed arboviral disease cases should be reported to FCHD.
- Although various drugs have been evaluated or empirically used for WNV disease, none have shown specific benefit to date. The National Institutes of Health maintains a registry of federally and privately supported clinical trials conducted in the United States and around the world. This registry is located at <http://clinicaltrials.gov/ct2/home>.
- The most effective way to avoid arboviral diseases is to prevent mosquito bites (mosquito repellent, long sleeves, etc.).

Figure 12. West Nile incidence rate by year, Fairfax County and the rest of Virginia



FCHD's Disease Carrying Insects Program

- Performs vector-borne disease surveillance for West Nile virus, Lyme disease, and other diseases through routine monitoring of vector (mosquito and tick) populations.
- Mosquito control activities, which are primarily focused on larviciding, occur during the mosquito season (May through October).
- A strong outreach and education program is used to increase community awareness of vector-borne diseases. The educational efforts also introduce and reinforce personal protection and homeowner vector prevention and control messages.

²⁸ CDC. (updated: 2013, June 14). West Nile Virus in the United States: Guidelines for Surveillance, Prevention, and Control. Retrieved from <http://www.cdc.gov/westnile/resources/pdfs/wnvGuidelines.pdf>.



Fairfax County Health Department Communicable Disease/Epidemiology Unit



Contact Information

Communicable Disease/Epidemiology Unit

(for all communicable disease reports & guidance during business hours)

703.246.2433 • TTY 711

FAX 703.653.1347

Communicable Disease Hotline

Health care providers should call 703-246-2433 to obtain the Communicable Disease Hotline number for reporting on weekends and evenings

Fairfax County Public Health Laboratory

703.246.3218 • TTY 711

FAX 703.653.9469

Rabies Program

(for all rabies reports & guidance during business hours)

703.246.2433 • TTY 711

FAX 703.653.6648

Rabies Hotline

Health care providers should call 703-246-2433 to obtain the Rabies Hotline number for reporting on weekends and evenings

FCHD Communicable Disease Services

Communicable Disease Surveillance and Investigation	<ul style="list-style-type: none"> FCHD conducts communicable disease surveillance and investigation with the goal of reducing morbidity and mortality within the community. When cases or outbreaks of disease are reported or identified, FCHD staff: <ul style="list-style-type: none"> Provide infection control guidance to clinicians, facilities, and infected individuals; Identify exposed individuals and provide guidance regarding disease prevention, including recommendations for the administration of prophylaxis (if appropriate).
Rabies	<ul style="list-style-type: none"> Rabies program staff provides guidance regarding rabies exposure assessment and PEP administration 24 hours a day. FCHD Laboratory provides animal rabies testing for human or domestic animal exposures.
Tuberculosis	<ul style="list-style-type: none"> Tuberculosis program staff provides clinical guidance regarding TB diagnosis and treatment. Free laboratory testing, chest x-rays, medications, and case management services are provided for all Fairfax County residents.
HIV/AIDS	<ul style="list-style-type: none"> Free HIV testing (including anonymous option) and HIV harm-reduction counseling is available through FCHD walk-in clinics and STD clinics. Clients may visit http://www.fairfaxcounty.gov/hd/hiv-testing-aids/ or call 703-246-2411 for service hours. HIV/AIDS program staff coordinates HIV/AIDS treatment, including treatment obtained through the AIDS Drug Assistance Program.
STD	<ul style="list-style-type: none"> STD testing and treatment are available free of charge at each of the five FCHD district offices. Clients may visit http://www.fairfaxcounty.gov/hd/std-clinic-sched.htm or call 703-246-2411 to confirm service hours. STD program staff provides partner notification services for reported STD cases.
Laboratory	<ul style="list-style-type: none"> FCHD laboratory conducts testing in support of communicable disease investigations including testing for TB, HIV, STDs, enteric pathogens, and rabies virus.
Outreach	<ul style="list-style-type: none"> FCHD provides educational outreach regarding communicable disease prevention and control throughout the Fairfax Community.

Virginia Reportable Disease List

Communicable Disease Reporting Guide for Clinicians

Disease reporting requirements for clinicians practicing in the Commonwealth of Virginia.

By law, Virginia clinicians must report diagnoses of the specified infections, diseases, and conditions listed on this poster. Both lab-confirmed and clinically suspect cases are reportable. The parallel system of lab reporting does not obviate the clinician's obligation to report. Some conditions (e.g., uncommon illness of public health significance, animal bites, HUS, pesticide poisoning, disease outbreaks) are rarely, if ever, identified by labs. We depend on clinicians to report.

Reports should be made to the patient's local health department (based on patient's home address) **and include at least the patient's name, home address, phone number, date of birth, gender, diagnosis, and date of symptom onset.** Most reports should be made within one working day of the diagnosis, but there are several important exceptions — please refer to the list on this poster.

Disease reporting enables appropriate public health follow up for your patients, helps identify outbreaks, provides a better understanding of morbidity patterns, and may even save lives. Remember that HIPAA does not prohibit you from reporting protected health information to public health authorities for the purpose of preventing or controlling diseases, including public health surveillance and investigations; see 45 CFR 164.512(b)(1)(i).3.

COMPLIANCE

A civil penalty may be imposed against a person or entity for failing or neglecting to comply with reporting regulations as issued by the State Board of Health of the Commonwealth of Virginia. State Board issued regulations include the requirements to report the diseases listed on this poster, along with related data; and to cooperate with local and state public health authorities in their investigation and control of reportable diseases. (Regulations for Disease Reporting and Control § 32.1-27.)

REPORT IMMEDIATELY*

- | | |
|--|--|
| Anthrax | Psittacosis |
| Botulism | Q Fever |
| Brucellosis | Rabies, Human and Animal |
| Cholera | Rubella |
| Diphtheria | Severe Acute Respiratory Syndrome (SARS) |
| <i>Haemophilus Influenzae</i> Infection, Invasive | Smallpox (Variola) |
| Hepatitis A, | Syphilis (Primary and Secondary) |
| Influenza, Novel Virus | Tuberculosis, active disease |
| Influenza –Associated Deaths in Children < 18 Years of Age | Tularemia |
| Measles | Typhoid/Paratyphoid fever |
| Meningococcal Disease | Unusual occurrence of disease of public health concern |
| Monkeypox | Vaccinia, disease or adverse event |
| Mycobacterial Diseases | <i>Vibrio</i> infection |
| Outbreaks, All | Viral hemorrhagic fever |
| Pertussis | Yellow Fever |
| Plague | |
| Poliovirus Infection | |

*within 24 hours of diagnosis

REPORT WITHIN THREE DAYS

- Acquired immunodeficiency syndrome (AIDS)
- Arboviral infections (e.g. dengue, EEE, LAC, SLE, WNV)
- Campylobacteriosis
- Chancroid
- Chickenpox (Varicella)
- *Chlamydia trachomatis* infection
- Creutzfeldt-Jakob disease if <55 years of age
- Cryptosporidiosis
- Cyclosporiasis
- Ehrlichiosis/Anaplasmosis
- *Escherichia coli* infection, Shiga toxin-producing
- Giardiasis
- Gonorrhea
- Granuloma inguinale
- Hantavirus pulmonary syndrome
- Hemolytic uremic syndrome (HUS)
- Hepatitis B (acute and chronic)
- Hepatitis C (acute and chronic)
- Hepatitis, other acute viral
- Human immunodeficiency virus (HIV) infection
- Influenza
- Lead, elevated blood levels
- Legionellosis
- Leprosy
- Lyme disease
- Lymphogranuloma venereum
- Malaria
- Mumps
- Ophthalmia neonatorum
- Rabies treatment, post-exposure
- Salmonellosis
- Shigellosis
- Spotted fever rickettsiosis
- *Staphylococcus aureus* infection, (invasive methicillin-resistant) and (vancomycin-intermediate or vancomycin-resistant)
- Streptococcal disease, Group A, invasive or toxic shock
- *Streptococcus pneumoniae* infection, invasive, in children <5 years of age
- Syphilis
- Tetanus
- Toxic substance-related illness
- Trichinosis (Trichinellosis)
- Tuberculosis infection in children <4 years of age
- Yersiniosis



Fairfax County Health Department
Communicable Disease/Epidemiology Unit
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Fairfax County Health Department
2013 Communicable Disease Summary



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